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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,179	09/26/2001	Ken Ioka	OOCL-71 (US-PI506)	9597

26479 7590 01/24/2003

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EXAMINER

CRUZ, MAGDA

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 01/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

Applicant(s)

09/964,179

IOKA, KEN

Examiner

Art Unit

Magda Cruz

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Higurashi, et al.

Higurashi, et al. (US Patent Number 6,222,593 B1) discloses an image projection and display device (column 2, lines 225-26) comprising a plurality of projectors (7a-7d), a projection screen (8) forming a focusing plane for projected images from the plurality of projectors (7a-7d), mutually overlapping regions existing between said images (Figure 1); a test image storing section (71) for storing prescribed test images (column 12, lines 18-22); an image capturing section (77a, 77b...) for acquiring projected test images (78) in which a prescribed test image (76) is projected onto said projection screen respectively by each of said projectors (79a, 79b...); a correction data calculating section (74) for calculating correction data for correcting the input images for

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the respective projectors, on the basis of the acquired test images (column 12, lines 23-31), in such a manner that a target brightness is achieved across the whole projection area including the overlapping regions (column 18, lines 13-18); a correction data storing section (92) for storing the correction data thus calculated (column 12, lines 42-46); an image correcting section for correcting the images input to the respective projectors, by using said correcting data (column 17, lines 31-35), wherein the uniform brightness is achieved across the whole projection area including the overlapping regions (column 18, lines 60-63). The correction data storing section stores initial correction data as first correction data (column 18, lines 8-10), said correction data calculating section calculates second correction data (column 18, lines 10-12), from the image of the prescribed test image projected after correction (column 18, lines 45-47) using the first correction data (column 18, lines 48-50); judges whether or not it is necessary to update the first correction data, according to the second correction data, and judges of an updating is necessary (column 9, line 66 through column 10, line 3). The correction data calculating section repeats the task of updating the first correction data (column 5, lines 47-50), until it is judged from the second correction data that it is not necessary to create new first correction data (column 7, lines 10-22).

Allowable Subject Matter

4. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach an image projection and display device, comprising in combination with the additionally recited elements, a light shielding sections disposed in the light paths of the plurality of projectors, so as to reduce the quantity of light in the overlapping regions on the projection screen.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fujita, et al. (US Patent Number 6,412,956 B2) discloses an image projection system including projections means for projecting an image.

Turner, et al. (US Patent Number 5,111,513) teaches a projected image line-width correction apparatus and method.

Schneider (US Patent Number 6,480,175 B1) shows a method and system for eliminating artifacts in overlapped projections.

Monson, et al. (US Patent Number 6,471,355 B1) discloses an image alignment system and a method for producing and maintaining a visually seamless image between two or more side-by-side images that are projected into a single screen.

Eouzan, et al. (US Patent Number 5,231,481) teaches a projection display device with negative feedback loop to correct all the faults of the projected image.

Finnila, et al. (US Patent Number 5,847,784) shows a self-adjusting tiled projector using test pattern and sensor.

Sasaki, et al. (US Patent Number 5,825,947) discloses an optical reproducing system for multimedia information recorded with a code data having function for correcting image reading distortion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magda Cruz whose telephone number is (703)308-6367. The examiner can normally be reached on Monday through Thursday 8:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703)308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.



RUSSELL ADAMS
SENIOR PATENT EXAMINER
MILTON CENTER 2800

Magda Cruz
Patent Examiner
January 18, 2003